



Alpha **HPA**

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ASX: **A4N**  
ASX Announcement  
28 July 2020

(3 pages by email)

## HPA FIRST PROJECT UPDATE

- **SX Component of the upscaled Pilot Plant commences**
- **Additional HPA test order received from Taiwan**
- **Project Permitting and Financing activities advanced**
- **Chemical Counterparty MOU exclusivity period extended**

The Board of Alpha HPA Limited ('Alpha HPA' or 'the Company') is pleased to provide an update on activities for its HPA First Project, representing the evaluation and intended commercialisation of the production of ~10,000tpa of high purity alumina (HPA) using the Company's proprietary licenced solvent extraction (SX) and HPA refining technology.

### DEMO SCALE PILOT PLANT PRODUCTION

Alpha HPA is currently gearing up to commence a large volume 'demo' scale operation of its Pilot Plant facility in Brisbane QLD, to meet larger scale test orders being received, particularly from sapphire glass/LED manufacturers. All required capital equipment orders have been placed and new equipment installation is continuing as delivered. The 'double flow' SX and Al-salt crystallisation stage of the process is now operational (see below).

### SX Component of the upscaled Pilot Plant commences

Following two short validation runs of the SX circuit at double the previous flow rates, the first SX plus Al-salt crystallisation stage campaign of the demo-scale Pilot Plant operation has now commenced. Current production rates are generating the intermediate high-purity salt at 2-3kg per hour. The first SX + crystallisation stage will be operated for approximately 8 days, and be followed by HPA pre-cursor and HPA production, ahead of pelleting and sintering to meet LED/sapphire glass end-user test orders.

### MARKET OUTREACH

#### Additional HPA test order received from Taiwan

Alpha HPA has received an additional test work order of HPA from Taiwan. The order was received to complete test work for a specialised high-purity abrasives application. The order has been despatched last week from the Company's existing HPA stockpile.

#### Market outreach commentary

Alpha HPA's market outreach program remains very active in several jurisdictions, including Taiwan. The Company has noted a number of businesses are re-visiting the security of their existing supply chains and considers this theme to be constructive to Alpha HPA's outreach program. On this basis, Alpha HPA expects further end-user orders in the coming month, as well test work feedback from end-users who are completing test work on the Company's HPA.

## CEMICAL COUNTERPARTY MOU EXTENDED

The HPA First Project is being progressed on the basis of the Project located within the Gladstone State Development Area ('GSDA'), where Alpha HPA has secured a contract for a 9.2ha land parcel immediately opposite the chemical facility operated by Orica Australia (refer map below). In March 2020, the Company signed a Memorandum of Understanding ('MoU') with Orica Australia Pty Ltd ('Orica') which sets out the volumes and pricing mechanisms for the supply of key process reagents and the offtake of by-product from the HPA First Project subject to the negotiation and finalisation of a more definitive Supply and Offtake Agreement ('Agreement').

The MoU also sets out the scope and commitment for the formation of an Engineering Co-operation Group ('ECG') with representatives from each party to review and advise on the engineering requirements of supply, offtake and project interface.

Under the terms of the MoU dated March 2020, Alpha HPA and Orica Australia have been co-operating on numerous workflows relating to Project interface including by-product test work and quality assurance as well as scoping level engineering studies on by-product concentration and piping locations.

Both Orica and the Company are pleased with the progress to date and accordingly have mutually agreed to extend the exclusivity arrangement within the MoU through to 31 October 2020.



## PROJECT FINANCING

Alpha HPA is working actively with support from its advisors (KPMG) on the HPA First Project Financing. The Company has supplied initial Project information to a number of Australian Commonwealth Government funding sources and is now progressing a number of their requests for information (RFI's). In addition, the Company has received confirmations of preliminary interest from a number of both domestic and international commercial lenders.

## PROJECT PERMITTING

Alpha HPA has engaged AECOM consultants to manage the Project permitting process for the HPA First Project. Permitting activities have been very active and include:

- Air quality and noise impact studies
- Traffic impact studies
- Water and storm water modelling
- On-site ecology studies
- Engagement with the various QLD and Local Government Regulators

Managing Director, Rimas Kairaitis, commented; *"This is a very active period for the Company and we are very pleased with progress on numerous fronts. Recent developments within global supply chains are of particular interest and Alpha HPA is aggressively pursuing these opportunities."*

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### **About the HPA First Project**

The Company's HPA First Project represents the evaluation and intended commercialisation of the production of ~10,000tpa of high purity alumina (HPA) using the Company's proprietary licenced solvent extraction and HPA refining technology. The technology provides for the extraction and purification of aluminium from an industrial feedstock to produce 4N (>99.99% purity) alumina for the intended use within the lithium ion battery and LED lighting industry. Following a successful testwork program and completion of a Pre-Feasibility Study (PFS), updated in March 2019, Alpha HPA has now completed Definitive Feasibility Study (DFS) based on the successful completion of its Pilot Plant program at its dedicated laboratory facility in Brisbane.

The Company has commenced full permitting, market outreach and project financing processes, with the expectation of positioning the HPA First Project to Final investment Decision.

### **Competent Persons Statement (Process Development Testwork)**

Information in this announcement that relates to metallurgical results is based on information compiled by or under the supervision of Dr Stuart Leary, an Independent Consultant trading as Delta Consulting Group. Dr Leary is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Dr Leary has sufficient experience to the activity which he is undertaking to qualify as a Competent Persons under the 2012 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Leary consents to the inclusion of the technical data in the form and context in which it appears.

For further information on testwork results and processes see ASX announcements dated 19 June 2020, 21 May 2020, 23 April 2020, 25 March 2020, 17 March 2020, 10 December 2019, 21 November 2019, 10 October 2019, 23 September 2019, 28 August 2019, 5 August 2019, 25 July 2019, 2 July 2019, 3 June 2019, 17 April 2019, 7 March 2019, 4 December 2018, 20 November 2018, 6 September 2018, 31 August 2018, 9 July 2018, 30 April 2018, 26 April 2018, 21 March 2018, 6 March 2018, 21 February 2018, 8 December 2017, 30 November 2017, 29 November 2017, 24 November 2017 and 13 November 2017.